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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,345	08/24/2001	Teruo Umemoto	1999/US	3613

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DENVER, CO 80202-5647

EXAMINER

CREPEAU, JONATHAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,345

Applicant(s)

UMEMOTO, TERUO

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,12,26-31,35,38,45,48 and 51-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,12,26-31,35,38,45,48 and 80-105 is/are allowed.
- 6) ☒ Claim(s) 51,53-57,59,60,62-68,70-77 and 79 is/are rejected.
- 7) ☒ Claim(s) 52,58,61,69 and 78 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action addresses claims 6, 12, 26-31, 35, 38, 45, 48 and 51-105. Claims 6, 12, 26-31, 35, 38, 45, 48 and 80-105 are allowed, and claims 52, 58, 61, 69, and 78 contain allowable subject matter. Claims 51, 53-57, 59, 60, 62-68, 70-77, and 79 are newly rejected over Uckert but these rejections were not necessitated by any amendment. As such, prosecution is reopened and this action is non-final.

In the amendment of May 9, 2005, Applicant authorized a \$600 charge for excess claim fees to deposit account no. 04-1415, and the charge was made by the USPTO on May 11, 2005. However, this fee was already charged by the USPTO on March 4, 2005. Thus, Applicant has overpaid by \$600. This money will be refunded back to deposit account no. 04-1415.

Claim Rejections - 35 USC § 102

2. Claims 51, 53-57, 60, 62-66, 68, and 70-77 are rejected under 35 U.S.C. 102(e) as being anticipated by Uckert et al (U.S. Pre-Grant Publication No. 2003/0027934) as evidenced by *Hawley's Condensed Chemical Dictionary*, 14th edition.

Uckert et al. is directed to an electric-energy generating device which comprises a copolymer of 9-fluorenone (see formula V(a) of Fig. 8). The device may be a photovoltaic device, which may be considered to be a "battery" (see paragraph 129 and definition of "battery")

in *Hawley's*). Each of device layers 120, 130, or 140 may contain the copolymer of 9-fluorenone, the layers 120 and 140 functioning as positive and/or negative electrodes. Each electrode has a current collector (110, 150). Regarding claims 4 and 5, the electrodes may further comprise an electroconductive agent (polymer) such as polyaniline (see paragraphs 126 and 135). The layer 130 of Uckert et al. may be considered to function as an "electrolyte" because it conducts ionic (i.e., positive) charge in addition to electrons.

Thus, the instant claims are anticipated.

Claim Rejections - 35 USC § 103

3. Claims 59, 67, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uckert et al.

The reference is applied to claims 51, 53-57, 60, 62-66, 68, and 70-77 for the reasons stated above. However, Uckert et al. do not expressly teach the weight percentage of the 9-fluorenone monomer being 20% or more.

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated to adjust the amount of 9-fluorenone monomer to affect the resulting characteristics of the copolymer of Uckert et al. It has been held that the discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. *In re Boesch*, 205 USPQ 215

(CCPA 1980). As such, the claimed weight percentage is not considered to distinguish over the reference.

Allowable Subject Matter

4. Claims 6, 12, 26-31, 35, 38, 45, 48 and 80-105 are allowed.
5. Claims 52, 58, 61, 69, and 78 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The reasons for allowance of the instant claims have been previously set forth and remain applicable.

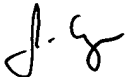
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Primary Examiner
Art Unit 1746
May 23, 2005